



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,711	05/01/2001	Onchuen (Daryn) Lau	ZETTA-01001US0GGG	7009
32605	7590	08/18/2005	EXAMINER	
MACPHERSON KWOK CHEN & HEID LLP 1762 TECHNOLOGY DRIVE, SUITE 226 SAN JOSE, CA 95110			HSU, ALPUS	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

Office Action Summary

Application No.

09/847,711

Applicant(s)

LAU ET AL.

Examiner

Alpus H. Hsu

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 and 31-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-30 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/1/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2665

1. Applicant's election with traverse of Group III (claims 21-30) in the reply filed on June 13, 2005 is acknowledged. The traversal is on the ground(s) that claims 19-20 should not be restricted apart from provisionally claim group 21-30 because no additional burden will be placed on the examiner in examining the co-related subject matter. This is not found persuasive because according to the restriction requirement in previous office action, Group II. Claims 3-20, drawn to a manufactured signal structured for data transmission, classified in class 370, subclass 522 and Group III. Claims 21-30, drawn to a data switching method utilizing queues, classified in class 370, subclass 412. The inventions are distinct, each from the other because the Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II and III, each has separate utility such as a signaling device and a queuing device. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

The applicant argued that claims 19-20 in Group II, which depend on claim 3, recites a signal structure including a competitive priority code field (i.e., item a.2), which has a co-related subject matter as "Zcell signals" in claim 21. The examiner disagrees since the two groups of claims are directed to two patentably distinct inventions. One cannot assume that one common field within a signal in two different utilities would make two group of inventions co-related as one common subject matter because a signal in a system merely constitutes a minor portion of the invention and should not be used as basis for referring to subject matter of the invention.

The requirement is still deemed proper and is therefore made FINAL.

Art Unit: 2665

2. This application is in condition for allowance except for the presence of claims 1-20, 31-35 to an invention non-elected with traverse in the reply filed on June 13, 2005. Applicant is requested to cancel the noted claims or take other appropriate action (37 CFR 1.144) in order to expedite the prosecution of the instant application.

The following is an examiner's statement of reasons for allowance:

The subject matter of claims 21-30 is allowable over the prior art of record because all prior arts fails to teach or suggest a switching method comprising: (a) in a switch card layer, loading flow contents into respective ones of Virtual Output Queues (VOQs), where each VOQ is associated with a respective unicast destination or a prespecified set of multicast destinations; (b) conducting bidding competitions between subsets of the VOQ contents to determine which of one or more smaller number of VOQ contents will be allowed to submit a passage request to a subset-associated part of a switching fabric layer; (c) stuffing bid-winning ones of the passage requests as primary requests into respective ZCell signals for transmission to the subset-associated parts of the switching fabric layer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Angle et al. '169, '646 & '788, Lau et al., Chao et al., Wilford et al., Dell et al. '883 & '578, Shah et al., and Chidambaran et al. are all cited to show the common feature of unicast and

Art Unit: 2665

multicast data flows switchover and/or scheduling utilizing virtual output queues similar to the claimed invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHH



Alpus H. Hsu
Primary Examiner
Art Unit 2665